

FFFFFFFFFFF	111	111	AAAAAAA
FFFFFFFFFFF	111	111	AAAAAAA
FFFFFFFFFFF	111	111	AAAAAAA
FFF	111111	111111	AAA
FFF	111111	111111	AAA
FFF	111111	111111	AAA
FFF	111	111	AAA
FFF	111	111	AAA
FFF	111	111	AAA
FFF	111	111	AAA
FFFFFFFFFFF	111	111	AAA
FFFFFFFFFFF	111	111	AAA
FFFFFFFFFFF	111	111	AAA
FFF	111	111	AAAAAA
FFF	111	111	AAAAAA
FFF	111	111	AAAAAA
FFF	111	111	AAA
FFF	111	111	AAA
FFF	11111111	11111111	AAA
FFF	11111111	11111111	AAA
FFF	11111111	11111111	AAA

FILEID**INIFCB

M 13

```
1 0001 0 MODULE INIFCB (
2 0002 0   LANGUAGE (BLISS32),
3 0003 0   IDENT = 'V04-000'
4 0004 0   )
5 0005 1 BEGIN
6 0006 1
7 0007 1
8 0008 1 ****
9 0009 1 *
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27 0027 1 *
28 0028 1 *
29 0029 1 ****
30 0030 1
31 0031 1 ++
32 0032 1
33 0033 1 FACILITY: F11ACP Structure Level 1
34 0034 1
35 0035 1 ABSTRACT:
36 0036 1
37 0037 1 These routines create and initialize a file control block
38 0038 1 from the given file header.
39 0039 1
40 0040 1 ENVIRONMENT:
41 0041 1
42 0042 1 STARLET operating system, including privileged system services
43 0043 1 and internal exec routines. These routines must be called in
44 0044 1 kernel mode.
45 0045 1
46 0046 1
47 0047 1 --
48 0048 1
49 0049 1
50 0050 1 AUTHOR: Andrew C. Goldstein, CREATION DATE: 14-Dec-1976 16:48
51 0051 1
52 0052 1 MODIFIED BY:
53 0053 1
54 0054 1   V03-002 LMP0221      L. Mark Pilant,      31-Mar-1984 12:16
55 0055 1   Add support for an ORB in the FCB.
56 0056 1
57 0057 1   V03-001 STJ3108      Steven T. Jeffreys, 24-Jun-1983
```

: 58 0058 1 | Fix link truncation error.
: 59 0059 1 |
: 60 0060 1 | A0100 ACG0001 Andrew C. Goldstein, 10-Oct-1978 20:01
: 61 0061 1 | Previous revision history moved to F11A.REV
: 62 0062 1 |
: 63 0063 1 | **
: 64 0064 1 |
: 65 0065 1 |
: 66 0066 1 LIBRARY 'SYSSLIBRARY:LIB:L32';
: 67 0067 1 REQUIRE 'SRCS:FCPDEF.B32';

```
: 69      0382 1 GLOBAL ROUTINE INIT_FCB (FCB, HEADER) : NOVALUE =
: 70
: 71      0383 1
: 72      0384 1 ++
: 73      0385 1
: 74      0386 1 FUNCTIONAL DESCRIPTION:
: 75      0387 1
: 76      0388 1 This routine initializes the given FCB according to the given
: 77      0389 1 file header.
: 78      0390 1
: 79      0391 1 CALLING SEQUENCE:
: 80      0392 1     INIT_FCB (ARG1, ARG2)
: 81      0393 1
: 82      0394 1 INPUT PARAMETERS:
: 83      0395 1     ARG1: FCB address
: 84      0396 1     ARG2: header address
: 85      0397 1
: 86      0398 1 IMPLICIT INPUTS:
: 87      0399 1     HEADER_LBN contains LBN of header block
: 88      0400 1
: 89      0401 1 OUTPUT PARAMETERS:
: 90      0402 1     NONE
: 91      0403 1
: 92      0404 1 IMPLICIT OUTPUTS:
: 93      0405 1     NONE
: 94      0406 1
: 95      0407 1 ROUTINE VALUE:
: 96      0408 1     NONE
: 97      0409 1
: 98      0410 1 SIDE EFFECTS:
: 99      0411 1     FCB initialized
: 100     0412 1
: 101     0413 1 !--
: 102     0414 1
: 103     0415 2 BEGIN
: 104     0416 2
: 105     0417 2 MAP
: 106     0418 2     FCB           : REF BBLOCK,   | FCB argument
: 107     0419 2     HEADER        : REF BBLOCK;  | file header arg
: 108     0420 2
: 109     0421 2 LOCAL
: 110     0422 2     FCB_ORB       : REF BBLOCK,   | Address of the ORB within the FCB
: 111     0423 2     MAP_AREA      : REF BBLOCK,   | pointer to header map area
: 112     0424 2     MAP_COUNT     : REF BBLOCK,   | count of map pointers
: 113     0425 2     MAP_POINTER   : REF BBLOCK,   | pointer to scan map
: 114     0426 2     FILESIZE      : REF BBLOCK,   | size of file in blocks
: 115     0427 2
: 116     0428 2 EXTERNAL
: 117     0429 2     HEADER_LBN    : ADDRESSING_MODE (GENERAL); ! LBN of file header
: 118     0430 2
: 119     0431 2 ! Set up the ORB address.
: 120     0432 2
: 121     0433 2     FCB_ORB = FCB[FCBSR_ORB];
: 122     0434 2
: 123     0435 2 ! Get the known constants and the simple stuff from the file header
: 124     0436 2     (i.e., header LBN, file ID, starting VBN, file owner and file protection).
: 125     0437 2
: 126     0438 2
```

```

: 126      0439 2 FCB[FCBSL_HDLBN] = .HEADER_LBN;
: 127      0440 2 FCB[FCBSW_FID_NUM] = .HEADER[FH1$W_FID_NUM];
: 128      0441 2 FCB[FCBSW_FID_SEQ] = .HEADER[FH1$W_FID_SEQ];
: 129      0442 2 FCB_ORB[ORB$W_UICMEMBER] = .HEADER[FH1$B_UICMEMBER];
: 130      0443 2 FCB_ORB[ORB$W_UICGROUP] = .HEADER[FH1$B_UICGROUP];
: 131      0444 2 FCB_ORB[ORB$V_PROT 16] = 1;
: 132      0445 2 FCB_ORB[ORB$W_PROT] = .HEADER[FH1$W_FILEPROT];
: 133      0446 2 IF .HEADER[FHT$V_SPOOL] THEN FCB[FCBSV_SPOOL] = 1;
: 134      0447 2 FCB[FCBSL_EFBLK] = ROT (.BBLOCK[HEADER[FH1$W_RECATTR], FATSL_EFBLK], 16);
: 135      0448 2 IF .FCB[FCBSL_EFBLK] NEQ 0
: 136      0449 2 AND .BBLOCK[HEADER[FH1$W_RECATTR], FATSW_FFBYTE] EQ 0
: 137      0450 2 THEN FCB[FCBSL_EFBLK] = .FCB[FCBSL_EFBLK] - 1;
: 138
: 139      0452 2 ! Now scan the map area. Get the starting LBN if the file is contiguous
: 140      0453 2 and count up the file size from the retrieval pointers.
: 141      0454 2 !
: 142      0455 2
: 143      0456 2 MAP_AREA = .HEADER + .HEADER[FH1$B_MPOFFSET]*2;
: 144      0457 2 MAP_POINTER = MAP_AREA + FM1$C_POINTERS;
: 145      0458 2 FCB[FCBSW_SEGN] = .MAP_AREA[FM1$B_EX_SEGNUM];
: 146
: 147      0460 2 FCB[FCBSL_STLBN] = 0;           ! assume non-contiguous file
: 148      0461 2 IF .HEADER[FH1$V_CONTIG]
: 149      0462 2 THEN
: 150      0463 3 BEGIN
: 151      0464 3   FCB[FCBSL_STLBN] = .MAP_POINTER[FM1$W_LOWLBN]; ! get low order LBN
: 152      0465 3   (FCB[FCBSL_STLBN])<16,85 = .MAP_POINTER[FM1$B_HIGHLBN]; ! and high order
: 153      0466 2 END;
: 154
: 155      0468 2 FILESIZE = 0;
: 156      0469 2 DECR MAP COUNT FROM .MAP_AREA[FM1$B_INUSE]/2 TO 1 DO
: 157      0470 3 BEGIN
: 158      0471 3   FILESIZE = .FILESIZE + .MAP_POINTER[FM1$B_COUNT] + 1;
: 159      0472 3   MAP_POINTER = .MAP_POINTER + 4;
: 160      0473 2 END;
: 161      0474 2 FCB[FCBSL_FILESIZE] = .FILESIZE;
: 162
: 163      0476 2 IF .FCB[FCBSL_EFBLK] GTR .FILESIZE
: 164      0477 2 THEN FCB[FCBSL_EFBLK] = .FILESIZE;
: 165
: 166      0479 1 END;                         ! end of routine INIT_FCB

```

```

.TITLE INIFCB
.IDENT \V04-000\
.EXTRN HEADER_LBN
.PSECT SCODE$,NOWRT,2

```

			003C 00000	.ENTRY INIT_FCB, Save R2,R3,R4,R5	: 0382
	53	04	AC D0 00002	MOVL FCB, R3	: 0433
	50	58	A3 9E 00006	MOVAB 88(R3), FCB_ORB	: 0439
34	A3	000000006	00 D0 0000A	MOVL HEADER_LBN, 52(R3)	: 0440
	52	08	AC D0 00012	MOVL HEADER, R2	: 0442
	A3	02	A2 D0 00016	MOVL 2(R2), 36(R3)	
24	60	08	A2 9B 0001B	MOVZBW 8(R2), (FCB_ORB)	

	02	A0	09	A2	9B	0001F	MOVZBW	9(R2)	2(FCB ORB)	: 0443		
	08	A0	01	88	00024		BISB2	#1, 11	(FCB ORB)	: 0444		
	18	A0	0A	A2	B0	00028	MOVW	10(R2)	, 24(FCB ORB)	: 0445		
04	0D	A2	04	E1	0002D		BBC	#4, 13(R2)	, 1S	: 0446		
	22	A3	10	88	00032		BISB2	#16	, 34(R3)			
	65	16	55	3C	A3	9E	00036	1S:	MOVAB	60(R3), R5	: 0447	
				10	9C	0003A	ROTL	#16,	22(R2), (R5)			
				07	13	0003F	BEQL	2S		: 0448		
				1A	A2	B5	00041	TS.W	26(R2)	: 0449		
					02	12	00044	BNEJ	2S			
					65	D7	00046	DECL	(R5)	: 0450		
			50		01	A2	9A	00048	MOVZE	1(R2), R0	: 0456	
			51			6240	3E	0004C	MOVAW	(R2)[R0], MAP AREA		
	2A	A3	50		0A	A1	9E	00050	MOVAB	10(R1), MAP_POINTER	: 0457	
					61	9B	00054	MOVZBW	(MAP AREA), -42(R3)	: 0458		
				30	A3	D4	00058	CLRL	48(R3)	: 0460		
				0C	A2	95	0005B	TSTB	12(R2)	: 0461		
			30	A3	02	A0	3C	00060	BGEQ	3S		
			32	A3		60	90	00065	MOVZWL	2(MAP_POINTER), 48(R3)	: 0464	
					52	D4	00069	3S:	MOVB	(MAP_POINTER), 50(R3)	: 0465	
			54		08	A1	9A	0006B	CLRL	FILESIZE	: 0468	
			54			02	C6	0006F	MOVZBL	8(MAP AREA), R4	: 0469	
					54	D6	00072	DIVL2	#2, R4			
					0C	11	00074	INCL	MAP_COUNT			
			51		01	A0	9A	00076	BRB	5S		
			52		01	A1	42	9E	0007A	MOVZBL	1(MAP_POINTER), R1	: 0471
					52	04	C0	0007F	MOVAB	1(R1)[FILESIZE], FILESIZE		
			50						ADDL2	#4, MAP_POINTER	: 0472	
			F1		54	F5	00082	5S:	S0BGTR	MAP_COUNT, 4S	: 0469	
	38	A3			52	D0	00085		MOVL	FILESIZE, 56(R3)	: 0474	
					65	D1	00089		CMPL	(R5), FILESIZE	: 0476	
					03	15	0008C		BLEQ	6S		
					52	D0	0008E		MOVL	FILESIZE, (R5)	: 0477	
					04	00091	6S:		RET		: 0479	

: Routine Size: 146 bytes. Routine Base: \$CODE\$ + 0000

```
: 167      0480 1
: 168      0481 1 END
: 169      0482 0 ELUDOM
```

PSECT SUMMARY

Name	Bytes	Attributes
\$CODE\$	146	NOVEC,NOWRT, RD , EXE,NOSHR, LCL, REL, CON,NOPIC,ALIGN(2)

Library Statistics

INIFCB
VO4-000

F 14
16-Sep-1984 01:07:36
14-Sep-1984 12:29:38 VAX-11 Bliss-32 v4.0-742
DISKSVMMASTER:[F11A.SRC]INIFCB.B32;1 Page 6
(2)

File
:_\$255\$DUA28:[SYSLIB]LIB.L32;1

----- Symbols -----			Pages Mapped	Processing Time
Total	Loaded	Percent		
18619	31	0	1000	00:01.9

COMMAND QUALIFIERS

: BLISS/CHECK=(FIELD,INITIAL,OPTIMIZE)/LIS=LIS\$:\$INIFCB/OBJ=OBJ\$:\$INIFCB MSRC\$:\$INIFCB/UPDATE=(ENH\$:\$INIFCB)

: Size: 146 code + 0 data bytes
: Run Time: 00:07.9
: Elapsed Time: 00:26.3
: Lines/CPU Min: 3642
: Lexemes/CPU-Min: 17410
: Memory Used: 110 pages
: Compilation Complete

0165 AH-BT13A-SE
VAX/VMS V4.0

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